

2001

Mary

Access DB# 56518

## SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: K. Weddington Examiner #: 68082 Date: 12-6-01  
 Art Unit: 1614 Phone Number 308-4650 Serial Number: 091865, 785  
 Mail Box and Bldg/Room Location: CM-2A17 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

\*\*\*\*\*  
 Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: \_\_\_\_\_

Inventors (please provide full names): Jens Ponikau

Earliest Priority Filing Date: \_\_\_\_\_

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

619 A method for treating non-invasive fungus-induced  
 rhinosinusitis with an antifungal agent

The antifungal agent is selected from

122 Amphotericin B,

Ketoconazole

Itraconazole

Sapronazole

Voriconazole

Flucytosine

Miconazole

Fluconazole

Griseofulvin

137 Clotrimazole

Econazole

~~Tera~~ Terconazole

Butenazole

Oxiconazole

Sulconazole

Ciclopirox Olamine

Haloprogin

Tolnaftate

140 Naftifine

Terbinafine

Morpholines

Nystatin

Natamycin

Butenofine

Undecylenic acid

Whitefield's ointment

Propionic acid

## STAFF USE ONLY

## Type of Search

## Vendors and cost where applicable

Searcher: Mary STN: 122  
 Searcher Phone #: \_\_\_\_\_ AA Sequence (#) \_\_\_\_\_ Dialog \_\_\_\_\_  
 Searcher Location: \_\_\_\_\_ Structure (#) \_\_\_\_\_ Questel/Orbit \_\_\_\_\_  
 Date Searcher Picked Up: \_\_\_\_\_ Bibliographic ☒ Dr. Link \_\_\_\_\_  
 Date Completed: 12/12 Litigation \_\_\_\_\_ Lexis/Nexis \_\_\_\_\_  
 Searcher Prep & Review Time: \_\_\_\_\_ Fulltext \_\_\_\_\_ Sequence Systems \_\_\_\_\_  
 Clerical Prep Time: \_\_\_\_\_ Patent Family \_\_\_\_\_ WWW/Internet \_\_\_\_\_  
 Online Time: 21 Other \_\_\_\_\_ Other (specify) \_\_\_\_\_

Weddington

847364

865785

=> fil caplus;e non invasive fungus/ct 5

COST IN U.S. DOLLARS	ENTRY	SINCE FILE SESSION	TOTAL
FULL ESTIMATED COST		69.18	804.58

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) TOTAL	SINCE FILE
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	ENTRY	SESSION
CA SUBSCRIBER PRICE	-3.53	-8.24

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E# FREQUENCY AT TERM

E#	FREQUENCY	AT	TERM
E1	0	1	NON/CT
E2	0	2	NON A/NON B HEPATITIS VIRUS/CT
E3	0	-->	NON INVASIVE FUNGUS/CT
E4	0	1	NON-/CT
E5	0	1	NON-A/CT

=> e rhinosinusitis/ct 5

E# FREQUENCY AT TERM

E#	FREQUENCY	AT	TERM
E1	2		RHINOSCLEROMA/CT
E2	0	1	RHINOSCLEROMATIS/CT
E3	0	-->	RHINOSINUSITIS/CT
E4	4	5	RHINOSPORIDIUM/CT
E5	5	5	RHINOSPORIDIUM SEEBERI/CT

=> fil mdel;e rhinosinusitis/ct 5

'MDEL' IS NOT A VALID FILE NAME

SESSION CONTINUES IN FILE 'CAPLUS'

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=> file medl

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FULL ESTIMATED COST		0.39	804.97

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	ENTRY	SINCE FILE SESSION
TOTAL		

CA SUBSCRIBER PRICE	0.00	-8.24
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On April 22, 2001, MEDLINE was reloaded. See HELP RLOAD for details.

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MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2001 vocabulary. Enter HELP THESAURUS for details.

The OLDMEDLINE file segment now contains data from 1958 through 1965. Enter HELP CONTENT for details.

Left, right, and simultaneous left and right truncation are available in the Basic Index. See HELP SFIELDS for details.

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=> e rhinosinusitis/ct 5

E#	FREQUENCY	AT	TERM
E1	0	2	RHINOSCLEROMAS/CT
E2	0	1	RHINOSCLEROMATIS/CT
E3	0	-->	RHINOSINUSITIS/CT
E4	0	2	RHINOSPORIDIOSES/CT
E5	247	6	RHINOSPORIDIOSIS/CT

=> e sinusitis/ct

ADDITIONAL TERMS AVAILABLE BY USING "SINUSITIS+XUSE/CT"

E#	FREQUENCY	AT	TERM
E1	0	2	SINUSITIDES, SPHENOID/CT
E2	0	2	SINUSITIDES, SPHENOIDAL/CT
E3	6877	21	--> SINUSITIS/CT
E4	0	2	SINUSITIS, ETHMOID/CT
E5	0	2	SINUSITIS, ETHMOIDAL/CT
E6	0	2	SINUSITIS, FRONTAL/CT
E7	0	2	SINUSITIS, MAXILLARY/CT
E8	0	2	SINUSITIS, SPHENOID/CT
E9	0	2	SINUSITIS, SPHENOIDAL/CT
E10	52		SINUSITIS: BL, BLOOD/CT
E11	55		SINUSITIS: CI, CHEMICALLY INDUCED/CT
E12	51		SINUSITIS: CL, CLASSIFICATION/CT

=> e e3+all/ct

E1	0	BT4	C Diseases/CT
E2	4149	BT3	Otorhinolaryngologic Diseases/CT
E3	0	BT4	C Diseases/CT

E4 11276 BT3 Respiratory Tract Diseases/CT  
 E5 2906 BT2 Nose Diseases/CT  
 E6 2088 BT1 Paranasal Sinus Diseases/CT  
 E7 0 BT4 C Diseases/CT  
 E8 0 BT3 Bacterial Infections and Mycoses/CT  
 E9 18375 BT2 Infection/CT  
 E10 0 BT3 C Diseases/CT  
 E11 11276 BT2 Respiratory Tract Diseases/CT  
 E12 18425 BT1 Respiratory Tract Infections/CT  
 E13 6877 --> Sinusitis/CT  
 E14 8049 MN C8.460.692.752./CT  
 E15 8049 MN C8.730.749./CT  
 E16 8049 MN C9.603.692.752./CT

DC an INDEX MEDICUS major descriptor

NOTE An inflammatory process of the mucous membranes of  
 the paranasal sinuses that occurs in three stages:  
 acute, subacute, and chronic. Sinusitis results  
 from any condition causing ostial obstruction or  
 from pathophysiologic changes in the mucociliary  
 transport mechanism.

INDX IM; sinusitis of specific sinus is also available  
 (e.g., ETHMOID SINUSITIS)

AQ BL CF CI CL CN CO DH DI DT EC EH EM EN EP ET GE HI  
 IM ME MI MO NU PA PC PPPS PX RA RH RI RT SU TH UR  
 US VE VI

MHTH NLM (1966)

E17 0 UF Sinusitides/CT  
 E18 278 NT1 Ethmoid Sinusitis/CT  
 E19 241 NT1 Frontal Sinusitis/CT  
 E20 808 NT1 Maxillary Sinusitis/CT  
 E21 156 NT1 Sphenoid Sinusitis/CT

\*\*\*\*\* END \*\*\*\*\*

=> s e13-e21

6877 SINUSITIS/CT (2 TERMS)

(SINUSITIS+XUSE/CT)

8049 C8.460.692.752./CT

8049 C8.730.749./CT

8049 C9.603.692.752./CT

6877 SINUSITIDES/CT (2 TERMS)

(SINUSITIS+XUSE/CT)

278 "ETHMOID SINUSITIS"/CT (8 TERMS)

("ETHMOID SINUSITIS"+XUSE/CT)

241 "FRONTAL SINUSITIS"/CT (4 TERMS)

("FRONTAL SINUSITIS"+XUSE/CT)

808 "MAXILLARY SINUSITIS"/CT (4 TERMS)

("MAXILLARY SINUSITIS"+XUSE/CT)  
 156 "SPHENOID SINUSITIS"/CT (8 TERMS)  
 ("SPHENOID SINUSITIS"+XUSE/CT)  
 L1 8049 (SINUSITIS/CT OR C8.460.692.752./CT OR C8.730.749./CT OR C9.603.  
 692.752./CT OR SINUSITIDES/CT OR "ETHMOID SINUSITIS"/CT OR  
 "FRON  
 TAL SINUSITIS"/CT OR "MAXILLARY SINUSITIS"/CT OR "SPHENOID  
 SINUS  
 ITIS"/CT)

=> fil caplus;e ?sinusitis?/ct 5

COST IN U.S. DOLLARS	ENTRY	SINCE FILE SESSION	TOTAL
FULL ESTIMATED COST		0.72	805.69

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E1 0 1 9Z -1-( 1S -4-CARBOXY-1-HYDROXYBUTYL)-2,4,6,9-PENTADEC

ATETRAENYL)-L-CYSTEINYL-/CT

E2 0 1 9Z -1-( 1S -4-CARBOXY-1-HYDROXYBUTYL)-2,4,6,9-PENTADEC

ATETRAENYL)-L-CYSTEINYL-4 RECEPTORS/CT

E3 0 --> ?SINUSITIS/?CT

E4 0 2 A 05040/CT

E5 0 2 A 1/CT

=> e sinusitis/ct 5

E# FREQUENCY AT TERM

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E1 0 1 SINUSARABICI/CT

E2 4 SINUSES/CT

E3 0 1 --> SINUSITIS/CT

E4 0 2 SINUSITIS SINUS/CT

E5 0 1 SINUSOID/CT

=> e e3+all/ct

E1 0 --> Sinusitis/CT

\*\*\*\*\* END \*\*\*\*\*

=> fil reg

COST IN U.S. DOLLARS		SINCE FILE	TOTAL
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ENTRY	SESSION
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FULL ESTIMATED COST	0.39	806.08
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TOTAL	

ENTRY	SESSION
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STRUCTURE FILE UPDATES: 10 DEC 2001 HIGHEST RN 374668-20-9  
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Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> s ("amphotercin b" or ketoconazole or itraconazole or saperconazole or voriconazole  
or flucytosine or miconazole or fluconazole or griseofulvin)/cn

0 "AMPHOTERCIN B"/CN  
1 KETOCONAZOLE/CN  
1 ITRACONAZOLE/CN  
1 SAPERCONAZOLE/CN  
1 VORICONAZOLE/CN  
1 FLUCYTOSINE/CN  
1 MICONAZOLE/CN  
1 FLUCONAZOLE/CN  
1 GRISEOFULVIN/CN  
L2 8 ("AMPHOTERCIN B" OR KETOCONAZOLE OR ITRACONAZOLE OR  
SAPERCONAZOL  
E OR VORICONAZOLE OR FLUCYTOSINE OR MICONAZOLE OR  
FLUCONAZOLE  
OR GRISEOFULVIN)/CN

=> s (clotrimazole or econazole or terconazole or butoconazole or oxiconazole or  
sulconazole or ciclopirox olamine or haloprogin or tolnaftate)/cn

1 CLOTRIMAZOLE/CN  
1 ECONAZOLE/CN  
1 TERCONAZOLE/CN  
1 BUTOCONAZOLE/CN  
1 OXICONAZOLE/CN  
1 SULCONAZOLE/CN  
1 CICLOPIROX OLAMINE/CN  
1 HALOPROGIN/CN



1 TOLNAFTATE/CN  
 L3 9 (CLOTRIMAZOLE OR ECONAZOLE OR TERCONAZOLE OR  
 BUTOCONAZOLE OR  
 OXICONAZOLE OR SULCONAZOLE OR CICLOPIROX OLAMINE OR  
 HALOPROGIN  
 OR TOLNAFTATE)/CN

=> s (naftifine or terbinafine or morpholine or nystatin or natamycin or butenafine or  
 undecylenic acid or "whitefield's ointment" or propionic acid or caprylic acid)/cn

1 NAFTIFINE/CN  
 0 TERBINOFINE/CN  
 1 MORPHOLINE/CN  
 1 NYSTATIN/CN  
 1 NATAMYCIN/CN  
 1 BUTENAFINE/CN  
 1 UNDECYLENIC ACID/CN  
 0 "WHITEFIELD'S OINTMENT"/CN  
 1 PROPIONIC ACID/CN  
 1 CAPRYLIC ACID/CN

L4 8 (NAFTIFINE OR TERBINOFINE OR MORPHOLINE OR NYSTATIN OR  
 NATAMYCIN  
 OR BUTENAFINE OR UNDECYLENIC ACID OR "WHITEFIELD'S  
 OINTMENT"  
 OR PROPIONIC ACID OR CAPRYLIC ACID)/CN

=> fil medline,capplus,embase,biosis,jicst,wpids

COST IN U.S. DOLLARS	ENTRY	SINCE FILE SESSION	TOTAL
FULL ESTIMATED COST		109.73	915.81

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) TOTAL	ENTRY	SESSION	SINCE FILE
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	ENTRY	SESSION	
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=> s (l1 or rhinosinus? or rhino(5a)sinus? or ?sinus?) and non invas?(5a)(fungus or fungi)

L5 1 FILE MEDLINE

L6 2 FILE CAPLUS

L7 1 FILE EMBASE

L8 2 FILE BIOSIS

LEFT TRUNCATION IGNORED FOR '?SINUS?' FOR FILE 'JICST-EPLUS'

L9 0 FILE JICST-EPLUS

L10 1 FILE WPIDS

TOTAL FOR ALL FILES

L11 7 (L1 OR RHINOSINUS? OR RHINO(5A) SINUS? OR ?SINUS?) AND  
NON INVAS

? (5A) (FUNGUS OR FUNGI)

Left truncation is not valid in the specified search field in the  
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Examples: '?TERPEN?' would be searched as 'TERPEN?' and '?FLAVONOID'  
would be searched as 'FLAVONOID.'

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Implied proximity is used in search fields indexed as single words,  
for example, the Basic Index.

=> dup rem l11

PROCESSING COMPLETED FOR L11

L12 6 DUP REM L11 (1 DUPLICATE REMOVED)

=> d 1-6 cbib abs

L12 ANSWER 1 OF 6 BIOSIS COPYRIGHT 2001 BIOSIS

2001:549784 Document No.: PREV200100549784. Methods and materials for treating  
and preventing inflammation of mucosal tissue. Ponikau, Jens (1). (1) 232  
Sixth Ave. SE., Rochester, MN, 55904 USA. Patent Info.: US 6291500  
September 18, 2001. Official Gazette of the United States Patent and  
Trademark Office Patents, (Sep. 18, 2001) Vol. 1250, No. 3, pp. No  
Pagination. e-file. ISSN: 0098-1133. Language: English.

AB The invention involves methods and materials for treating and preventing non-invasive fungus-induced mucositis. Specifically, the invention involves administering an antifungal agent such that it contact mucus in an amount, at a frequency, and for a duration effective to prevent, reduce, or eliminate non-invasive fungus-induced rhinosinusitis. This invention also provides methods and materials for diagnosing non-invasive fungus-induced rhinosinusitis and culturing non-invasive fungus from a mammalian mucus sample as well as specific antifungal formulations and medical devices for treating and preventing non-invasive fungus-induced rhinosinusitis. In addition, the invention provides methods and materials for treating and preventing other non-invasive fungus-induced mucositis conditions such as chronic otitis media, chronic colitis, and Crohn's disease. Further, the invention involves methods and materials for treating and preventing chronic asthma symptoms.

L12 ANSWER 2 OF 6 BIOSIS COPYRIGHT 2001 BIOSIS

2001:448633 Document No.: PREV200100448633. Methods and materials for treating and preventing inflammation of mucosal tissue. Ponikau, Jens (1). (1) 232 Sixth Ave., SE., Rochester, MN, 55904 USA. Patent Info.: US 6207703 March 27, 2001. Official Gazette of the United States Patent and Trademark Office Patents, (Mar. 27, 2001) Vol. 1244, No. 4, pp. No Pagination. e-file. ISSN: 0098-1133. Language: English.

AB The invention involves methods and materials for treating and preventing non-invasive fungus-induced mucositis. Specifically, the invention involves administering an antifungal agent such that it contact mucus in an amount, at a frequency, and for a duration effective to prevent, reduce, or eliminate non-invasive fungus-induced rhinosinusitis. This invention also provides methods and materials for diagnosing non-invasive fungus-induced rhinosinusitis and culturing non-invasive fungus from a mammalian mucus sample as well as specific antifungal formulations and medical devices for treating and preventing non-invasive fungus-induced rhinosinusitis. In addition, the invention provides methods and materials for treating and preventing other non-invasive fungus-induced mucositis conditions such as chronic otitis media, chronic colitis, and Crohn's disease. Further, the invention involves methods and materials for treating and preventing chronic asthma symptoms.

L12 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2001 ACS      DUPLICATE 1

2000:772847 Document No. 133:307333 Eosinophil degranulating conditions. Ponikau, Jens; Sherris, David; Kern, Eugene (Mayo Foundation for Medical Education and Research, USA). PCT Int. Appl. WO 2000065341 A1 20001102,

56 pp. DESIGNATED STATES: W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY,

CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 2000-US10971 20000421. PRIORITY: US 1999-PV130603 19990422.

**AB** The invention provides methods and materials related to the diagnosis of eosinophil degranulating conditions. Specifically, the invention provides methods and materials that involve visual types of anal. (e.g., microscopic anal.) that are used to det. the presence or absence of a horseshoe-shaped eosinophil granule structure within a mucus sample collected from a mammal. The presence of a horseshoe-shaped eosinophil granule structure within a patient's mucus indicates that the patient has an eosinophil degranulating condition. In addn., the invention provides methods and materials that involve immunol. types of anal. (e.g., immunoassays) that are used to det. if a patient's mucus contains a tissue-damaging amt. of eosinophil granule content that is outside the eosinophil granule and within the mucus. Like the presence of a horseshoe-shaped eosinophil granule structure, the presence of a tissue-damaging amt. of eosinophil granule content outside the eosinophil granule and within the mucus indicates that the patient has an eosinophil degranulating condition. Further, the invention provides diagnostic kits that can be used to det. whether or not a patient has an eosinophil degranulating condition.

L12 ANSWER 4 OF 6 MEDLINE

2000399545 Document Number: 20343564. PubMed ID: 10885150. [Paranasal sinus mycoses]. Le micosi rinosinusalì. Castelnovo P; Gera R; Di Giulio G; Canevari F R; Benazzo M; Emanuelli E; Galli J; Di Girolamo S; Staffieri A. (Clinica Otorinolaringoiatrica, I.R.C.C.S. Policlinico San Matteo, Università di Pavia. ) ACTA OTORHINOLARYNGOLOGICA ITALICA, (2000

Feb) 20 (1) 6-15. Journal code: 1HX; 8213019. ISSN: 0392-100X. Pub. country: Italy. Language: Italian.

**AB** In recent years there has been a marked increase in mycosis infections of the paranasal sinuses, attributed both to an increase in the survival of subjects at risk and improved diagnostic techniques (endoscopy, CT, MR) able to identify cases which had previously gone unrecognized and treated as aspecific chronic sinusitis. The present study involves 45 cases (4.3%) out of a total of 1050 patients who had undergone endoscopic surgery for sinusopathy between April 1994 and December 1998. Following

the Katzenstein classification, the cases were broken down into non-invasive chronic mycoses or fungus ball (34 cases), allergic mycoses (7), chronic indolent invasive mycoses (3) and fulminating invasive mycosis (1 case). The mycetes most often involved was *Aspergillus Fumigatus* (76.9%). The recurrent symptom was facial algia, followed by nasal obstruction. Paranasal sinuses endoscopy did not modify the specific picture. CT presented such indicative signs as focal areas with non-homogeneous intensity, images of metal-like foreign bodies and endosinus calcifications in 84.4% of the cases. MR--performed in only 6 cases--always presented T2 images showing the typical signal void area corresponding to pathological lesions. All patients underwent endoscopic surgery of the paranasal sinus. The effectiveness of this treatment differed according to the clinical form. In the fungus balls surgery always resolved the pathology without requiring subsequent pharmacological treatment. In allergic mycosis, surgery improved the symptom of nasal respiratory obstruction but local drug treatment was required. With the aid of drug treatment, surgery resolved chronic indolent invasive mycoses and prevented the endocranial progression of complications. In the cases of fulminating invasive mycosis, timely surgery prevented the onset of endocranial complications and made it possible to perform antimycotic polychemotherapy to control the disease. This experience shows how important a protocol involving several different tests is in diagnosing the many clinical forms of paranasal sinus mycoses and distinguishing them from sinusopathies. Endoscopic surgery is indicated for all forms of paranasal sinus mycoses although the realistic objectives differ according to type.

L12 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2001 ACS

1999:282082 Document No. 130:306586 Methods and materials for treating and preventing inflammation of mucosal tissue using antifungal agents, and diagnostic methods and materials. Ponikau, Jens (USA). PCT Int. Appl. WO 9920261 A2 19990429, 98 pp. DESIGNATED STATES: W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 1998-US22403 19981022. PRIORITY: US 1997-62709 19971022; US 1997-63414 19971028; US 1997-63418 19971028; US 1998-83272 19980428; US 1998-86397 19980522.

AB The invention involves methods and materials for treating and preventing non-invasive fungus-induced mucositis. Specifically, the invention involves administering an antifungal agent such that it contacts mucus in an amt., at a frequency, and for a duration effective to prevent, reduce,

or eliminate non-invasive fungus-induced rhinosinusitis. This invention also provides methods and materials for diagnosing non-invasive fungus-induced rhinosinusitis and culturing non-invasive fungus from a mammalian mucus sample as well as specific antifungal formulations and medical devices for treating and preventing non-invasive fungus-induced rhinosinusitis. In addn., the invention provides methods and materials for treating and preventing other non-invasive fungus-induced mucositis conditions such as chronic otitis media, chronic colitis, and Crohn's disease. Further, the invention involves methods and materials for treating and preventing chronic asthma symptoms.

L12 ANSWER 6 OF 6 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.

1999211451 EMBASE [Allergic fungal sinusitis: Clinico-pathological aspects. Findings on CT and MR]. SINUSITIS FUNGICA ALERGICA: ASPECTOS CLINICOPATOLOGICOS Y HALLAZGOS EN TC Y RM. Romero A.; Bueno A.; Conde M.A.; Trigo J.E.. A. Romero, Huerta del Obispo, 11008 Cadiz, Spain. Radiologia 41/4 (285-290) 1999. Refs: 23. ISSN: 0033-8338. CODEN: RBSEBR. Pub. Country: Spain. Language: Spanish. Summary Language: English; Spanish.

AB Allergic fungal sinusitis (AFS) represents the most recently described form of chronic sinusitis caused by fungi. It occurs in affects teenagers and young adults with atopic antecedents. This disease is a non-invasive chronic sinusitis, fungus acts as the allergen, causing a host immune response, mediated by type I and III reactions. Typically, several paranasal sinuses are usually involved with unilateral predominance. Most common clinical findings are headache, different grades of nasal obstruction and proptosis. Diagnostic criteria have been proposed for this entity, including imaging findings obtained with computed tomography (CT). Computed tomography and magnetic resonance imaging findings together have recently been postulated as practically pathognomonic. Treatment and prognosis of this entity, different from other types of fungal sinusitis, makes important to achieve a correct diagnosis. On this task, imaging studies as CT and MR play an important role.

=> s (11 or sinusitis or rhinosinusitis or sinus?)

L13 79793 FILE MEDLINE  
L14 21896 FILE CAPLUS  
L15 68339 FILE EMBASE  
L16 55576 FILE BIOSIS  
L17 15829 FILE JICST-EPLUS

L18 15602 FILE WPIDS

TOTAL FOR ALL FILES

L19 257035 (L1 OR SINUSITIS OR RHINOSINUSITIS OR SINUS?)

=> s (I2 or amphotericin b or ketoconazole or itraconazole or saperconazole or voriconazole or flucytosine or miconazole or fluconazole or griseofulvin)

L20 21954 FILE MEDLINE

L21 12448 FILE CAPLUS

L22 38403 FILE EMBASE

L23 20211 FILE BIOSIS

L24 1654 FILE JICST-EPLUS

L25 1022 FILE WPIDS

TOTAL FOR ALL FILES

L26 95692 (L2 OR AMPHOTERICIN B OR KETOCONAZOLE OR ITRACONAZOLE OR SAPERCO

NAZOLE OR VORICONAZOLE OR FLUCYTOSINE OR MICONAZOLE OR FLUCONAZO

LE OR GRISEOFULVIN)

=> s (I3 or clotrimazole or econazole or terconazole or butoconazole or oxiconazole or sulconazole or ciclopirox olamine or haloprogin or tolnaftate)

L27 2167 FILE MEDLINE

L28 2474 FILE CAPLUS

L29 6135 FILE EMBASE

L30 2211 FILE BIOSIS

L31 148 FILE JICST-EPLUS

L32 335 FILE WPIDS

TOTAL FOR ALL FILES

L33 13470 (L3 OR CLOTRIMAZOLE OR ECONAZOLE OR TERCONAZOLE OR BUTOCONAZOLE

OR OXICONAZOLE OR SULCONAZOLE OR CICLOPIROX OLAMINE OR HALOPROGI

N OR TOLNAFTATE)

=> s (I4 or naftidine or terbinafine or morpholine or nystatin or natamycin or butenafine or undecylenic acid or whitefield! ointment or propionic acid or caprylic acid)

L34 14701 FILE MEDLINE

L35 74334 FILE CAPLUS

L36 18839 FILE EMBASE

L37 14331 FILE BIOSIS

L38 1141 FILE JICST-EPLUS

L39 14661 FILE WPIDS

TOTAL FOR ALL FILES

L40 138007 (L4 OR NAFTIDINE OR TERBINAFINE OR MORPHOLINE OR  
NYSTATIN OR

NATAMYCIN OR BUTENAFINE OR UNDECYLENIC ACID OR  
WHITEFIELD! OINTM

ENT OR PROPIONIC ACID OR CAPRYLIC ACID)

=> s l19 and (l26 or l33 or l40)

L41 453 FILE MEDLINE

L42 45 FILE CAPLUS

L43 693 FILE EMBASE

L44 236 FILE BIOSIS

L45 30 FILE JICST-EPLUS

L46 17 FILE WPIDS

TOTAL FOR ALL FILES

L47 1474 L19 AND (L26 OR L33 OR L40)

=> s l47 and (noninvas? or non invas?)

L48 18 FILE MEDLINE

L49 1 FILE CAPLUS

L50 23 FILE EMBASE

L51 9 FILE BIOSIS

L52 1 FILE JICST-EPLUS

L53 1 FILE WPIDS

TOTAL FOR ALL FILES

L54 53 L47 AND (NONINVAS? OR NON INVAS?)

=> dup rem l54

PROCESSING COMPLETED FOR L54

L55 33 DUP REM L54 (20 DUPLICATES REMOVED)

=> s l54 and (treat? or therap?)

L56 18 FILE MEDLINE

L57 1 FILE CAPLUS

L58 23 FILE EMBASE

L59 7 FILE BIOSIS

L60 1 FILE JICST-EPLUS

L61 1 FILE WPIDS

TOTAL FOR ALL FILES

L62 51 L54 AND (TREAT? OR THERAP?)

=> d l55 1-33 cbib abs;s l62 not l54



2001453932 Document Number: 21391261. PubMed ID: 11499230. Fungal infections of the paranasal sinuses. Karci B; Burhanoglu D; Erdem T; Hilmioglu S; Inci R; Veral A. (Ege University, Medical Faculty, ENT Department, Izmir, Turkey. ) REVUE DE LARYNGOLOGIE OTOLOGIE RHINOLOGIE, (2001) 122 (1) 31-5. Journal code: SDD; 0414144. ISSN: 0035-1334. Pub. country: France. Language: English.

AB Fungal infections can be mainly grouped into four types. The invasive forms are acute sinusitis (fulminant), chronic sinusitis (indolent), whereas the non-invasive forms are mycetoma and allergic fungal sinusitis. From December 1993 to December 1997, 27 cases of fungal sinusitis, 22 of which were noninvasive forms, and 5 of which were invasive forms, were treated and are presented in this study. When we classified the patients with fungal sinusitis, 11 were diagnosed as mycetoma, 9 as allergic fungal sinusitis, 3 as acute fulminant sinusitis and 2 as chronic indolent sinusitis, while 2 patients were not included in our four groups of sinusitis. In all mycetoma cases the active agent was *Aspergillus*. Patients with non invasive forms of sinusitis were all treated with endoscopic sinus surgery. 2 of the patients with invasive forms of sinusitis underwent maxillectomy and they were given Amphotericin-B. With a mean follow up of 20 months, only 3 recurrences were seen. The infection recurred in 2 patients with allergic fungal sinusitis and 1 patient with chronic invasive sinusitis. However, 2 patients with acute fulminant invasive sinusitis died before they were operated on, and 1 patient died postoperatively.

L55 ANSWER 2 OF 33 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.

2001072285 EMBASE [Non-invasive fungal sinusitis; allergic fungal sinusitis and sinusal mycetomas]. SINUSITIS FUNGICAS NO INVASIVAS: SINUSITIS FUNGICA ALERGICA Y MICETOMAS SINUSALES. Plaza G.; Toledano A.; Plaza A.; Oliete S.; Noriega J.; Galindo N.. G. Plaza, C/Moreno Nieto, 13, 6 B, 28005 Madrid, Spain. gplaza@thalcorcon.es. Acta Otorrinolaringologica Espanola 51/7 (603-612) 2000. Refs: 67.

ISSN: 0001-6519. CODEN: AOTEA3. Pub. Country: Spain. Language: French. Summary Language: English; French.

AB We review non-invasive fungal sinusitis (FS) cases treated at our Unit following the recent SF classification, based on physiopathology, treatment and prognosis. We report 7 FS cases treated during 2 years and followed a minimum of 24 months. They are two allergic FS, one of them related to an allergic bronchopulmonary aspergillosis, and five mycetomas, two of them without a sinusal foreign body, sphenoidal and maxillary

respectively, and three caused by a maxillary foreign body. All were treated by endoscopic sinus surgery (ESS). The two allergic cases were also treated with systemic corticoids in the postoperative period. We review the clinical presentation of the different types of non-invasive FS, the importance of endoscopy and imaging techniques in their management, the usefulness of ESS, the common association of FS to foreign bodies, and their prognosis.

L55 ANSWER 3 OF 33 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.

2000353999 EMBASE Brain abscess. Calfee D.P.; Wispelwey B.. Dr. B. Wispelwey, Department of Medicine, Univ. of Virginia School of Medicine, Charlottesville, VA 22908, United States. Seminars in Neurology 20/3 (353-360) 2000.

Refs: 63.

ISSN: 0271-8235. CODEN: SEMNEP. Pub. Country: United States. Language: English. Summary Language: English.

AB The epidemiology of brain abscess has changed with the increasing incidence of this infection in immunocompromised patients, particularly solid organ and bone marrow transplant recipients, and the decreasing incidence of brain abscess related to sinusitis and otitis. A number of new neuroimaging modalities, including single photon emission computed tomography, positron emission tomography, perfusion magnetic resonance imaging, and magnetic resonance spectroscopy, provide an initial noninvasive approach to diagnosis. The recommendations for the management of intracranial mass lesions in human immunodeficiency virus-infected individuals has changed as the incidence of toxoplasmic encephalitis has decreased with the use of trimethoprim-sulfamethoxazole prophylaxis. The epidemiology, pathogenesis, microbiology, clinical presentation, diagnosis, treatment and prognosis of brain abscess in the beginning of the 21st century are provided in this review.

L55 ANSWER 4 OF 33 MEDLINE

DUPLICATE 2

2000303466 Document Number: 20303466. PubMed ID: 10845047. Semi-invasive allergic aspergillosis of the paranasal sinuses. Oyarzabal M F; Chevretton E B; Hay R J. (Department of Otolaryngology, Guy's Hospital, London, UK. ) JOURNAL OF LARYNGOLOGY AND OTOTOLOGY, (2000 Apr) 114

(4)

290-2. Journal code: IWN; 8706896. ISSN: 0022-2151. Pub. country: ENGLAND: United Kingdom. Language: English.

AB Aspergillosis of the nose and paranasal sinuses has classically been divided into four types: allergic, non-invasive, invasive and fulminant. Recent reports have suggested that a semi-invasive form with bone destruction and erosion, but without fungal tissue invasion, may occur. We present a case of allergic non-invasive aspergillosis of the

paranasal sinuses with associated bone destruction extending into the orbit and anterior cranial fossa, in a non-immunocompromised patient. Surgical debridement combined with a prolonged course of oral itraconazole has resulted in long-term resolution with no evidence of recurrence of disease five years later.

L55 ANSWER 5 OF 33 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.

2000123136 EMBASE Fungal sinusitis. DeShazo R.D.. Dr. R.D. DeShazo, Department of Medicine, University of Mississippi, Medical Center, 2500 North State Street, Jackson, MS 39216-4505, United States. rdeshazo@medicine.umsmed.edu. Pediatric Asthma, Allergy and Immunology 14/1 (3-13) 2000.

Refs: 36.

ISSN: 0883-1874. CODEN: PAAIEP. Pub. Country: United States. Language: English. Summary Language: English.

AB Until recently, there has been no consensus regarding the classification of either the noninvasive or invasive syndromes of fungal sinusitis. This has led to confusion as to both the diagnosis and treatment of these conditions. I was stimulated by my association with John Salvaggio, M.D., who had a career-long interest in fungal diseases, to conduct a series of studies leading to a proposed new classification for fungal sinusitis. That classification and present notions as to appropriate diagnosis and treatment are reviewed in this paper.

L55 ANSWER 6 OF 33 CAPLUS COPYRIGHT 2001 ACS DUPLICATE 3

1999:282082 Document No. 130:306586 Methods and materials for treating and preventing inflammation of mucosal tissue using antifungal agents, and diagnostic methods and materials. Ponikau, Jens (USA). PCT Int. Appl. WO 9920261 A2 19990429, 98 pp. DESIGNATED STATES: W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 1998-US22403 19981022. PRIORITY: US 1997-62709 19971022; US 1997-63414 19971028; US 1997-63418 19971028; US 1998-83272 19980428; US 1998-86397 19980522.

AB The invention involves methods and materials for treating and preventing non-invasive fungus-induced mucositis. Specifically, the invention involves administering an antifungal agent such that it contacts mucus in an amt., at a frequency, and for a duration effective to prevent, reduce, or eliminate non-invasive fungus-induced rhinosinusitis. This invention also provides methods and materials for diagnosing

non-invasive fungus-induced rhinosinusitis and culturing non-invasive fungus from a mammalian mucus sample as well as specific antifungal formulations and medical devices for treating and preventing non-invasive fungus-induced rhinosinusitis. In addn., the invention provides methods and materials for treating and preventing other non-invasive fungus-induced mucositis conditions such as chronic otitis media, chronic colitis, and Crohn's disease. Further, the invention involves methods and materials for treating and preventing chronic asthma symptoms.

L55 ANSWER 7 OF 33 MEDLINE

DUPLICATE 4

1998379154 Document Number: 98379154. PubMed ID: 9713532. Comparison of topical administration of clotrimazole through surgically placed versus nonsurgically placed catheters for treatment of nasal aspergillosis in dogs: 60 cases (1990-1996). Mathews K G; Davidson A P; Koblik P D; Richardson E F; Komtebedde J; Pappagianis D; Hector R F; Kass P H. (Department of Surgical, School of Veterinary Medicine, University of California, Davis 95616, USA. ) JOURNAL OF THE AMERICAN VETERINARY MEDICAL

ASSOCIATION, (1998 Aug 15) 213 (4) 501-6. Journal code: HAV; 7503067. ISSN: 0003-1488. Pub. country: United States. Language: English.

AB OBJECTIVE: To examine the clinical response to topical administration of clotrimazole in dogs with nasal aspergillosis, to compare effect of surgically placed versus nonsurgically placed catheters used for administration on outcome, and to examine whether subjective scoring of computed tomographic images can predict outcome. DESIGN: Retrospective case series. ANIMALS: 60 dogs with nasal aspergillosis. PROCEDURE: Information including signalment, history, diagnostics, treatment method, and outcome was retrieved from medical records of dogs with nasal aspergillosis treated between 1990 and 1996 at the University of California School of Veterinary Medicine or cooperating referral practices. Final outcome was determined by telephone conversations with owners and referring veterinarians. Images obtained before treatment were subjectively assessed to develop an algorithm for predicting outcome. RESULTS: Clotrimazole solution (1%) was infused during a 1-hour period via catheters surgically placed in the frontal sinus and nose (27 dogs) and via nonsurgically placed catheters in the nose (18). An additional 15 dogs received 2 to 4 infusions by either route. Topical administration of clotrimazole resulted in resolution of clinical disease in 65% of dogs after 1 treatment and 87% of dogs after one or more treatments. The scoring system correctly classified dogs with unfavorable and favorable responses 71 to 78% and 79 to 93% of the time, respectively. CLINICAL IMPLICATIONS: Topical administration of clotrimazole, using either technique, was an effective treatment for nasal aspergillosis in dogs. Use of non-invasive intranasal infusion of clotrimazole eliminated the

need for surgical trephination of frontal sinuses in many dogs and was associated with fewer complications.

L55 ANSWER 8 OF 33 MEDLINE

DUPLICATE 5

1999041657 Document Number: 99041657. PubMed ID: 9826284. Management of nasal aspergillosis in a dog with a single, noninvasive intranasal infusion of clotrimazole. Smith S A; Andrews G; Biller D S. (Department of Clinical Sciences, College of Veterinary Medicine, Kansas State University, Manhattan 66506, USA. ) JOURNAL OF THE AMERICAN ANIMAL HOSPITAL ASSOCIATION, (1998 Nov-Dec) 34 (6) 487-92. Journal code: B91; 0415027. ISSN: 0587-2871. Pub. country: United States. Language: English.

AB An 11-year-old, spayed female keeshond was presented for unilateral epistaxis and serous nasal discharge of four weeks duration. Initial nasal radiographs, rhinoscopy, and histopathology suggested severe, destructive lymphoplasmacytic rhinitis. The patient deteriorated while receiving an anti-inflammatory dose of prednisone. A computed tomographic scan of the nose demonstrated a soft-tissue density in both the right nasal cavity and frontal sinus. Samples for histopathology obtained at surgery were diagnostic for nasal aspergillosis. All clinical signs resolved with a single, noninvasive infusion of intranasal clotrimazole and a four-week course of oral itraconazole.

L55 ANSWER 9 OF 33 MEDLINE

DUPLICATE 6

1999078825 Document Number: 99078825. PubMed ID: 9861832. Paranasal sinus mycoses in north India. Panda N K; Sharma S C; Chakrabarti A; Mann S B. (Department of Otolaryngology, Postgraduate Institute of Medical Education and Research, Chandigarh, India. ) MYCOSES, (1998 Sep-Oct) 41 (7-8) 281-6. Journal code: NOF; 8805008. ISSN: 0933-7407. Pub. country: GERMANY: Germany, Federal Republic of. Language: English.

AB Recognizing the high incidence of paranasal sinus mycoses in north India, we analysed retrospectively the clinical, mycological and management aspects of 178 patients with proven disease attending our institute. On the basis of clinical, radiological, histopathological and mycological findings, the patients could be categorized into those with allergic (8), non-invasive (92) and invasive (78) disease types. Bony erosion without mucosal invasion by fungi was seen in 16 patients with non-invasive disease. Young men from rural areas were the most commonly affected. Rhinorrhoea with nasal polyposis (45.8%) and proptosis (46.4%) was the most common presentation. Concurrent involvement of the maxillary and ethmoid sinuses was common in these patients, whereas isolated sphenoid and frontal sinuses were involved in the invasive variety only. Orbital and intracranial extensions were detected in 100% and 13.2%, respectively, of patients with the invasive type of disease. *Aspergillus flavus* (79.7%) was the most common isolate. Surgical

debridement and sinus ventilation were adequate for the effective management of the non-invasive disease. However, adjuvant medical therapy was included in treatment of the semi-invasive and invasive varieties of the disease. Itraconazole was found to be most useful in prevention of recurrence in the invasive type. Mortality was highest (33.3%) among patients with zygomycotic infection. Invasive fungal granuloma with orbital and intra-cranial invasion is a distinct entity in terms of its clinical course and treatment compared with non-invasive fungal sinusitis, and it needs to be treated aggressively with surgical excision and postoperative itraconazole.

L55 ANSWER 10 OF 33 MEDLINE

DUPLICATE 7

1998199259 Document Number: 98199259. PubMed ID: 9538458. Skull base osteitis following fungal sinusitis. Swift A C; Denning D W. (Department of Otolaryngology, Aintree Hospitals Trust, Walton, Liverpool. ) JOURNAL OF LARYNGOLOGY AND OTOTOLOGY, (1998 Jan) 112 (1) 92-7. Journal code:

IWN;

8706896. ISSN: 0022-2151. Pub. country: ENGLAND: United Kingdom. Language: English.

AB *Aspergillus* sp. sinusitis is not uncommon in immunocompromised patients but is unusual in patients who are not immunocompromised. The disease may occur as a saprophytic condition, as an allergic sinusitis or as a potentially lethal invasive disease. The differentiation between non-invasive and invasive *Aspergillus* sp. sinusitis is crucial and this distinction is fully discussed. The treatment options are also considered. Invasive disease requires aggressive treatment with long-term antifungal agents in sufficient doses combined with wide surgical excision. We present a patient who presented with invasive *Aspergillus fumigatus* sinusitis and subsequently developed cranial neuropathies and skull base osteitis. She was initially treated with oral itraconazole (400 mg daily) for 18 months but due to lack of response this was changed to a new experimental oral azole (voriconazole) which was continued for a further 14 months. She has since remained well for the last five years.

L55 ANSWER 11 OF 33 MEDLINE

DUPLICATE 8

1998061942 Document Number: 98061942. PubMed ID: 9400770. Orbital involvement in allergic fungal sinusitis. Klapper S R; Lee A G; Patrinely J R; Stewart M; Alford E L. (Department of Ophthalmology, Cullen Eye Institute, Baylor College of Medicine, Houston, Texas 77030, USA. ) OPHTHALMOLOGY, (1997 Dec) 104 (12) 2094-100. Journal code: OI5; 7802443. ISSN: 0161-6420. Pub. country: United States. Language: English.

AB BACKGROUND: Although allergic fungal sinusitis is a relatively common, noninvasive form of paranasal sinus mycosis, and despite frequent orbital involvement, there have been few reports of this condition in the

ophthalmic literature. METHODS: Two cases of allergic fungal sinusitis having orbital symptoms are described. The current classification, typical presentation, and ideal management of fungal sinusitis are reviewed. RESULTS: Distinguishing radiologic and pathologic features were present in both patients. *Aspergillus flavus* was cultured in one case, and *Bipolaris spicifera* was cultured in the other. CONCLUSIONS: Allergic fungal sinusitis is a unique subset of sino-orbital disease with highly characteristic clinical, radiologic, and pathologic features. Unlike invasive forms of mycotic disease, allergic fungal sinusitis may be managed adequately with surgical debridement, aeration of the involved sinuses, and systemic and topical corticosteroids.

L55 ANSWER 12 OF 33 MEDLINE

DUPLICATE 9

1998093416 Document Number: 98093416. PubMed ID: 9431388. Infection due to *Paecilomyces lilacinus*: a challenging clinical identification. Saberhagen C; Klotz S A; Bartholomew W; Drews D; Dixon A. (Department of Medicine (Section of Infectious Diseases), Veterans Affairs Medical Center, Kansas City, Missouri 64128-2295, USA. ) CLINICAL INFECTIOUS DISEASES, (1997 Dec) 25 (6) 1411-3. Journal code: A4J; 9203213. ISSN: 1058-4838. Pub. country: United States. Language: English.

AB We describe a case of noninvasive sinusitis caused by *Paecilomyces lilacinus* in a patient with diabetes mellitus. Cure was achieved by endoscopic drainage and aspiration of the fungal mass. We discuss the difficulty in and clinical importance of distinguishing *Paecilomyces* from *Aspergillus*.

L55 ANSWER 13 OF 33 MEDLINE

97198123 Document Number: 97198123. PubMed ID: 9046195. Nasosinusal fungal granuloma--clinical profile. Andrews G; Kurien M; Anandi V; Ramakrishna B; Raman R. (Department of ENT, Christian Medical College and Hospital, Vellore, South India. ) SINGAPORE MEDICAL JOURNAL, (1996 Oct) 37 (5) 470-4. Journal code: URI; 0404516. ISSN: 0037-5675. Pub. country: Singapore. Language: English.

AB Fifty cases of nasosinusal fungal granuloma were admitted under the ENT Department in a teaching tertiary care hospital in India during a thirteen-year period. *Aspergillus* species was found to be the most common causative fungus (29) followed by *Mucorales* (14), *Entomophthorales* (5) and *Fusarium* (2) species. There were 13 cases of non-invasive and 16 cases of invasive variants of Aspergillosis. In spite of intravenous amphotericin B therapy and radical surgical debridement, 81% in the invasive group showed relapse and required prolonged oral antifungal drugs and multiple surgical procedures. Among the 14 cases of Mucormycosis, all of the 10 cases who received intravenous amphotericin B and radical surgery showed complete recovery with no relapse over a period of 2 to 10

years. This is contrary to earlier published reports which suggest poor prognosis. The entomophthoromycosis received oral steroids and cotrimoxazole, and oral potassium iodide or intravenous amphotericin in case of relapse. Both the cases of Fusariosis recovered completely with oral ketoconazole.

L55 ANSWER 14 OF 33 MEDLINE

97070069 Document Number: 97070069. PubMed ID: 8962738. [Aspergillosis of maxillary sinus: a case report]. Aspergillosis de seno maxilar. A proposito de un caso. Landa Aranzabal M; Rivas Salas A; Rodriguez Garcia L; Abrego Olano M; Gorostiaga Aznar F; Algaba Guimera J. (Servicio de ORL, Residencia Sanitaria Nuestra Senora de Aranzazu, San Sebastian. ) ACTA OTORRINOLARINGOLOGICA ESPANOLA, (1996 Jul-Aug) 47 (4) 321-4. Journal code: APU; 14540260R. ISSN: 0001-6519. Pub. country: Spain. Language: Spanish.

AB A case of semi-invasive maxillary aspergillosis that presented with epiphora and responded well to surgical treatment is reported. Sixteen percent of cases of chronic sinusitis are produced by mycosis (particularly aspergillosis). The infection may be limited to the affected sinus (non-invasive forms) or may destroy the sinus wall, without tissue invasion (semi-invasive forms) or with tissue invasion (invasive forms). The diagnosis is mainly histological. Cultures present a high percentage of false positives and negatives. Treatment consists of surgical debridement of the sinus. Systemic amphotericin B is reserved for invasive aspergillosis (particularly fulminant cases).

L55 ANSWER 15 OF 33 MEDLINE

96405896 Document Number: 96405896. PubMed ID: 8810021. Computed tomographic assessment of noninvasive intranasal infusions in dogs with fungal rhinitis. Mathews K G; Koblik P D; Richardson E F; Davidson A P; Pappagianis D. (Department of Surgical and Radiological Sciences, School of Veterinary Medicine, University of California, Davis 95616, USA. ) VETERINARY SURGERY, (1996 Jul-Aug) 25 (4) 309-19. Journal code: XBX; 8113214. ISSN: 0161-3499. Pub. country: United States. Language: English.

AB The distribution of infusate administered to 12 dogs with fungal rhinitis, using a noninvasive, intranasal technique, was evaluated by computed tomography (CT). In every dog, contrast medium was identified on the postinfusion CT images, within the frontal sinuses, and throughout all areas of the nasal cavity. Adverse effects were transient and mild. The results of this study indicate that intranasal infusion may be a viable alternative to trephination of the frontal sinuses to administer antifungal medications in dogs with fungal rhinitis.

L55 ANSWER 16 OF 33 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.



96283480 EMBASE Document No.: 1996283480. [Mycoses of the paranasal sinuses - A ten-year survey of the patients in the ENT Department of the Cantonal Hospital in Aarau]. PILZERKRANKUNGEN DER NEBENHOHLEN. UBERSICHT DER

ENTWICKLUNG IM AARAUER PATIENTENKOLLEKTIV DER LETZTEN ZEHN JAHRE. Jaquierey

C.; Podvinec M.. HNO-Klinik, Kantonsspital, CH-5001 Aarau, Switzerland. Oto-Rhino-Laryngologia Nova 6/2 (111-115) 1996.

ISSN: 1014-8221. CODEN: OTNOEQ. Pub. Country: Switzerland. Language: German. Summary Language: German; English.

AB Mycoses of the paranasal sinuses are becoming more frequent. This increase, which has been ascertained in the past years, is possibly due to an accumulation of local and general predisposing factors. Beside the superficial invasion of the mucosa, caused mainly by *Aspergillus* spp., the invasive and destructive rhinocerebral form of mucormycosis has a more dramatic course and is seen mostly in immune-deficient patients. Of the patients surgically treated at the ENT Department of the cantonal hospital in Aarau between 1984 and 1994, 24 patients had histologically confirmed mycosis of the paranasal sinuses. 20 patients have been followed up, none of which had a recurrence of the mycotic infection. All patients underwent surgical treatment. In cases of non-invasive mycotic infections endoscopic surgery was implemented. In cases of extensive mycotic infection, the conservative Caldwell-Luc technique was performed. Invasive mycoses such as the rhinocerebral form of mucormycosis needed a more radical surgical treatment together with systemic antimycotic therapy.

L55 ANSWER 17 OF 33 MEDLINE

DUPLICATE 10

96338132 Document Number: 96338132. PubMed ID: 8758630. *Aspergillus* sinusitis: clinical aspects and treatment outcomes. Min Y G; Kim H S; Lee K S; Kang M K; Han M H. (Department of Otolaryngology, Seoul National University College of Medicine, South Korea. ) OTOLARYNGOLOGY - HEAD

AND

NECK SURGERY, (1996 Jul) 115 (1) 49-52. Journal code: ON8; 8508176. ISSN: 0194-5998. Pub. country: United States. Language: English.

AB Seventy-two cases of *Aspergillus* sinusitis were analyzed during a period of 14 years from January 1980 through October 1993. There were 60 cases of primary type and 12 cases of secondary type. The maxillary and ethmoid sinuses were most commonly affected in both primary and secondary types. The sphenoid sinus was commonly involved in secondary type. Fourteen (23%) cases of primary type and 4 (33%) cases of secondary type demonstrated sinus wall destruction on computed tomography or magnetic resonance images. Seventy percent of primary type and all cases of secondary type showed focal or diffuse areas of increased attenuation in

the soft tissue mass on computed tomography scans. Sixteen cases assessed by magnetic resonance imaging showed decreased signal intensities on T1-weighted images and markedly reduced signal intensities on T2-weighted images. Fifty-nine (98%) of 60 cases of primary type were noninvasive, and 1 was invasive. In secondary type, 10 (83%) of 12 patients had noninvasive disease. The most common coexisting disease in secondary aspergillosis was diabetes mellitus. Thickened mucosa with necrotic brownish green material, which was the most common finding in both types, was found in 33 patients with primary type and in 5 with secondary type. Surgery was performed in most cases, among which 4 patients received chemotherapy after surgery with amphotericin B with or without flucytosine. All patients were cured without recurrence during a mean follow-up period of 13 months.

L55 ANSWER 18 OF 33 BIOSIS COPYRIGHT 2001 BIOSIS

1996:73003 Document No.: PREV199698645138. Distribution of topical agents in the frontal sinuses and nasal cavity of dogs: Comparison between current protocols for treatment of nasal aspergillosis and a new noninvasive technique. Richardson, Elisabeth F. (1); Matthews, Kyle G.. (1) Veterinary Surgical Associates, 1410 Monument Blvd., Concord, CA 94520 USA. Veterinary Surgery, (1995) Vol. 24, No. 6, pp. 476-483. ISSN: 0161-3499. Language: English.

AB To document and compare patterns of distribution of topically applied antifungal medication, heads from 42 canine cadavers were assigned to seven treatment groups which included two current surgical treatment protocols for nasal aspergillosis, and a new, noninvasive method. Catheters (8 Fr) were placed through trephine holes into the frontal sinuses and nasal cavity. Dilute dye was injected through the catheters and the heads were sectioned sagittally. The administration of 5 mL of dye into the lateral frontal sinus and nasal cavity (group IA, 10 mL total) was compared with 25 mL injected through catheters placed bilaterally in the lateral frontal sinus and nasal cavity (group II, 100 mL total). Both were compared with the administration of 50 mL of dye through a catheter placed in the dorsal nasal meatus via each nostril (group III). The heads in group III had significantly ( $P < .05$ ) better dye distribution to all cavities than group IA and better distribution to the rostral frontal sinus than group II. Groups IV to VI were designed to show the pattern of distribution of dye to the contralateral nasal cavity and frontal sinuses. In all groups, dye injected into the lateral frontal sinus did not cross into the ipsilateral rostral frontal sinus or vice versa unless the transverse septum dividing the compartments had been penetrated during trephination.

L55 ANSWER 19 OF 33 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.

95231138 EMBASE Document No.: 1995231138. Primary and secondary aspergillosis of the paranasal sinuses: Clinical features and treatment outcome. Min -g. Y.; Lee -h C.; Lee -s. K.; Kang -k. M.; Han -h. M.. Department of Otolaryngology, Seoul National University Hospital, 28 Yeonkun-dong, Chongno-gu, Seoul, 110-744, Korea, Republic of. Asian Journal of Surgery 18/3 (231-235) 1995. ISSN: 1015-9584. CODEN: AJSUEF. Pub. Country: Hong Kong. Language: English. Summary Language: English.

AB Seventy-two cases of aspergillosis of the paranasal sinuses seen between January 1980 and October 1993 were analysed. There were 60 cases of primary aspergillosis and 12 cases of secondary aspergillosis. The maxillary and ethmoid sinuses were most commonly affected in both primary and secondary infections and the sphenoid sinus was commonly involved in secondary infection. Fourteen cases (23%) of primary and four cases (33%) of secondary aspergillosis showed sinus wall destruction on computed tomography (CT) or MRI images. Seventy percent of the primary and all the secondary cases exhibited focal or diffuse areas of increased attenuation in the paranasal sinus soft tissue mass on CT scan. Sixteen cases assessed by MRI showed decreased signal intensities on T1-weighted images and markedly reduced signal intensities on T2-weighted images. In 59 (98%) patients, the primary aspergillosis was non-invasive, and in one, it was invasive. In 10 (83%) patients, the secondary aspergillosis was noninvasive. The most common concomitant disease in secondary aspergillosis was diabetes mellitus. Thickened mucosa with necrotic brownish-green material, which was the most common finding in both types, was found in 33 patients (56%) with primary and in five patients (46%) with secondary aspergillosis. Surgery was performed in 70 cases, among which five cases received chemotherapy with amphotericin B postoperatively, with or without flucytosine. Sixty-eight (97%) patients were cured without recurrence during a mean follow-up period of 13 months.

L55 ANSWER 20 OF 33 MEDLINE

95304269 Document Number: 95304269. PubMed ID: 7784796. Aspergillosis of the paranasal sinuses. Saeed S R; Brookes G B. (National Hospital for Neurology and Neurosurgery, London, United Kingdom. ) RHINOLOGY, (1995 Mar) 33 (1) 46-51. Journal code: TEX; 0347242. ISSN: 0300-0729. Pub. country: Netherlands. Language: English.

AB Aspergillosis of the paranasal sinuses is a well-established clinical entity which has recently been classified into non-invasive and invasive forms with distinct sub-divisions of both types. Two cases are described, both highlighting potential serious complications of the disease as well as the importance of adequate medical and surgical treatment in effecting a favourable outcome. The disease is reviewed and the question as to whether cases necessarily fall into previously-defined clinical and pathological categories is also discussed.

L55 ANSWER 21 OF 33 MEDLINE

94238207 Document Number: 94238207. PubMed ID: 8182317. An algorithmic approach to aspergillus sinusitis. de Carpentier J P; Ramamurthy L; Denning D W; Taylor P H. (Hope Hospital, University of Manchester. ) JOURNAL OF LARYNGOLOGY AND OTOTOLOGY, (1994 Apr) 108 (4) 314-8.

Journal

code: IWN; 8706896. ISSN: 0022-2151. Pub. country: ENGLAND: United Kingdom. Language: English.

AB The effective management of paranasal sinus aspergillosis requires early diagnosis, histological classification, surgery and where appropriate, chemotherapy. Fungal sinusitis may be easily missed unless a high index of suspicion is maintained and specific culture and histology requested. The disease is classified into invasive and noninvasive types, each being divided into two subgroups: invasive aspergillosis may be either fulminant or indolent and noninvasive disease localized or allergic. The literature is reviewed and an algorithmic approach to aspergillus sinusitis proposed. The importance of histologically differentiating invasive from noninvasive aspergillosis prior to selecting the appropriate treatment options is stressed. CT scan should precede definitive surgery, and be used in follow-up. Close and prolonged follow-up is essential.

L55 ANSWER 22 OF 33 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.

94300130 EMBASE Document No.: 1994300130. Allergic fungal sinusitis. Delsupehe K.G.; Corey J.P.. Dienst Neus Keel Oorziekten, UZ St Raphael, Kapucijnenvoer 33,3000 Leuven, Belgium. Acta Oto-Rhino-Laryngologica Belgica 48/3 (257-264) 1994. ISSN: 0001-6497. CODEN: AORLAE. Pub. Country: Belgium. Language: English. Summary Language: English.

AB Allergic fungal sinusitis (A.F.S.) is a benign non-invasive sinus disease related to a hypersensitivity reaction to fungal antigens that can be caused by a variety of fungal organisms. All the reported causative agents belong to either the Moniliaceae or the Dematiaceae family. A.F.S. is to be expected in young patients usually with an atopic history presenting as refractory sinus disease. Often the diagnosis is only made at surgery. A correct diagnosis is based upon positive histopathology and positive fungal culture. An immunologic workup can be very helpful. The current proposed treatment is primarily surgical in combination with steroid medical treatment. Because of the strong tendency to recur a close clinical, endoscopic and radiological follow-up is warranted.

L55 ANSWER 23 OF 33 MEDLINE

DUPLICATE 11

95215747 Document Number: 95215747. PubMed ID: 7701229. Adjuvant itraconazole in the treatment of destructive sphenoid aspergillosis. Rowe-Jones J M; Freedman A R. (Department of Otolaryngology, St. George's Hospital, London, United Kingdom. ) RHINOLOGY, (1994 Dec) 32 (4) 203-7. Ref: 37. Journal code: TEX; 0347242. ISSN: 0300-0729. Pub. country: Netherlands. Language: English.

AB Paranasal aspergillosis is a potentially progressive continuum of disease, classically described as having four forms: allergic, non-invasive, invasive, and fulminant. The first two have been considered together as extramucosal disease whilst the latter two are both variants of tissue-invasive disease. Sphenoid aspergillosis, given its anatomical location is a more aggressive disease than that found affecting the other paranasal sinuses, even when non-invasive, and may be fatal. This is compounded by the fact that diagnosis is difficult and so may be made late when aspergillosis is consequently more advanced. Intracranial extension may occur via the direct spread of invasive disease or along communicating veins despite intact sinus walls and lack of fungal mucosal penetration. Once this occurs mortality is high. We have successfully treated three cases of destructive sphenoid aspergillosis, two of which had intracranial extension, with surgery and adjuvant anti-fungal chemotherapy including itraconazole. We recommend the use of post-operative itraconazole in all cases of sphenoid sinus aspergillosis. Additionally, when there is evidence of spread to the brain or other adjacent structures we would advocate an initial course of intravenous amphotericin B followed by long-term oral itraconazole.

L55 ANSWER 24 OF 33 MEDLINE

DUPLICATE 12

94203043 Document Number: 94203043. PubMed ID: 8152366. Fungal sinusitis in patients with AIDS: report of 4 cases and review of the literature. Meyer R D; Gaultier C R; Yamashita J T; Babapour R; Pitchon H E; Wolfe P R. (Division of Infectious Diseases, Cedars-Sinai Research Institute, UCLA School of Medicine, Los Angeles, California. ) MEDICINE, (1994 Mar) 73 (2) 69-78. Ref: 73. Journal code: MNY; 2985248R. ISSN: 0025-7974. Pub. country: United States. Language: English.

AB We report here 3 cases of aspergillus sinusitis in patients with AIDS and the 1st fully described case, to our knowledge, of sinusitis associated with *Pseudallescheria boydii* in a patient with AIDS. We review the microbiology and pathology of fungal sinusitis in patients with AIDS and the morphologic and clinical features and treatment of *P. boydii* infection and aspergillus sinusitis. Fungal sinusitis in patients with HIV or AIDS generally occurs later in the course of primary disease with low CD4+ lymphocyte counts (< 50/mm<sup>3</sup>), unlike bacterial sinusitis which may occur at any time. Differentiation between invasive and noninvasive forms is likely not important, in contrast to fungal sinusitis in noncompromised patients. The number of cases is likely to increase as the

number of patients with AIDS increases, patients survive longer, and other opportunistic infections are prevented or treated. Causative agents are likely to be resistant to fluconazole, which is in widespread use. Aspergillus sinusitis in patients with HIV or AIDS occurs in both those with and without traditional risk factors. Fungal sinusitis may present vexing management problems and be relentlessly progressive in the face of therapy. Ideal therapy has yet to be defined but an early combined surgical and medical approach in these compromised patients is preferred.

L55 ANSWER 25 OF 33 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.

93002677 EMBASE Document No.: 1993002677. Allergic bronchopulmonary aspergillosis. Vaughan L.M.. College of Pharmacy, Medical University of South Carolina, 171 Ashley Avenue, Charleston, SC 29425-0810, United States. Clinical Pharmacy 12/1 (24-33) 1993.  
ISSN: 0278-2677. CODEN: CPHADV. Pub. Country: United States. Language: English. Summary Language: English.

AB The history, clinical features, diagnosis, treatment, and monitoring of allergic bronchopulmonary aspergillosis (ABPA) are described. ABPA is characterized by an immunologic reaction to the antigens of noninvasive *Aspergillus fumigatus*, which colonizes the bronchial lumen of affected individuals. It is a potential and often unrecognized pulmonary fibrotic complication in patients with asthma and cystic fibrosis. ABPA can occur at any age and may lead to cor pulmonale, respiratory failure, and death as a result of end-stage fibrotic lung destruction. Early diagnosis is essential for management of ABPA. Criteria for diagnosis of ABPA are (1) episodic bronchial obstruction, (2) peripheral blood eosinophilia, (3) immediate cutaneous reactivity to *A. fumigatus*, (4) precipitating serum antibodies to *A. fumigatus*, (5) elevated total serum IgE, (6) history of pulmonary infiltrates, (7) elevated serum IgE and serum IgG to *A. fumigatus*, and (8) proximal bronchiectasis. The total serum IgE concentration and chest roentgenograms can be used to monitor drug therapy. ABPA has five stages: acute, remission, exacerbation, corticosteroid-dependent asthma, and fibrotic. The most effective treatment for ABPA is oral prednisone 0.5 mg/kg/day for 14 days, on alternate days for three months, and tapering by 5 mg every two weeks for an additional three months. ABPA is a potentially fatal, noninfectious, inflammatory pulmonary disease coexistent with asthma and cystic fibrosis. With early diagnosis, adequate oral corticosteroid treatment, and IgE and chest roentgenographic monitoring, fibrotic lung complications can be averted and corticosteroid adverse effects minimized.

L55 ANSWER 26 OF 33 MEDLINE

89325360 Document Number: 89325360. PubMed ID: 2502407. Aspergillosis. Bodey G P; Vartivarian S. (Department of Medical Specialties, University

of Texas M.D. Anderson Cancer Center, Houston 77030. ) EUROPEAN JOURNAL  
OF  
CLINICAL MICROBIOLOGY AND INFECTIOUS DISEASES, (1989 May) 8 (5)  
413-37.

Ref: 183. Journal code: EM5; 8804297. ISSN: 0934-9723. Pub. country:  
GERMANY, WEST: Germany, Federal Republic of. Language: English.

AB *Aspergillus* spores are ubiquitous in the environment and may become concentrated in hospital ventilation systems. Colonization in normal hosts can lead to allergic diseases ranging from asthma to allergic bronchopulmonary aspergillosis. Normal hosts rarely develop invasive disease, which is primarily an infection of severely immunocompromised patients. The major predisposing factors for infection include prolonged neutropenia, chronic administration of adrenal corticosteroids, the insertion of prosthetic devices, and tissue damage due to prior infection or trauma. Since *Aspergillus* spp. are respiratory pathogens, the most common form of infection is pneumonia followed by sinusitis. Patients with preexistent cavitory disease may develop noninvasive aspergillomas. Most infections are caused by *Aspergillus fumigatus*. The organism is capable of invading across all natural barriers, including cartilage and bone. It has a propensity for invading blood vessels causing thrombosis and infarction. The diagnosis of pulmonary infection is usually difficult to establish because the organism is seldom cultured from sputum and can represent contamination in some cases. Therapy in immunocompromised hosts is less than satisfactory and amphotericin B is the only agent with significant activity. There is anecdotal evidence to suggest that the addition of 5-fluorocytosine to amphotericin B may be beneficial.

L55 ANSWER 27 OF 33 JICST-EPlus COPYRIGHT 2001 JST

890265280 A case of aspergillosis of the maxillary sinus.. HAYASHIDA

KEN-ICHI; MIZUKI HARUMI; YANAGISAWA SHIGETAKA; HIRANO  
KIMIHIKO; KOIZUMI

KEN; SHIMIZU MASATSUGU. Medical College of Oita, School of Medicine.  
Nippon Kokuka Gakkai Zasshi (Journal of the Japanese Stomatological  
Society). (1988) vol. 37, no. 4, pp. 993-997. Journal Code: F0912A (Fig.  
7, Tbl. 1, Ref. 23) CODEN: NKOGAV; CODEN: 0029-0297; Pub. Country: Japan.  
Language: Japanese.

AB In recent years, cases of paranasal aspergillosis have been increasing. We recently encountered a case of aspergillosis of the maxillary sinus, which is relatively rare in the field of maxillofacial surgery. We would like to present that case with review of the literature on this disease and discussion. The patient, a 42-year-old woman, visited our clinic complaining of pain in the right buccal region. She was diagnosed chronic maxillary sinusitis and treated with antibiotics and irrigation of maxillary sinus for about 2 weeks. Cheese-like lumps were removed from the maxillary sinus by the irrigation and histopathological examination of them showed fungus balls of *aspergillus*. Radical Caldwell-Luc operation

was carried out on the right maxillary sinus under general anesthesia. After surgical removal of infected mucosa and fungus balls, irrigation with Amphotericin B was done for 10 days. The patient improved and 8 months after the operation was clinically free from aspergillosis. Aspergillosis of the paranasal sinuses is classified into 3 types: non-invasive, invasive and fulminant. Because the patient was not in immunodeficient condition, our case was thought to be a non-invasive type aspergillosis.(author abst.)

L55 ANSWER 28 OF 33 BIOSIS COPYRIGHT 2001 BIOSIS

1989:81279 Document No.: BR36:37370. ASPERGILLOSIS OF THE PARANASAL SINUSES.

SARTI E J; LUCENTE F E. DEP. OTOLARYNGOL., N.Y. EYE EAR INFIRMARY-N.Y.

MED. COLL., NEW YORK, N.Y.. Ear, Nose Throat J., (1988) 67 (11), 824,826-828,831. CODEN: ENTJDO. Language: English.

L55 ANSWER 29 OF 33 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.

88161776 EMBASE Document No.: 1988161776. Paranasal sinus disease with intracranial extension: Aspergillosis versus malignancy. Sarti E.J.; Blaugrund S.M.; Lin P.T.; Camins M.B.. Department of Otolaryngology, Lenox Hill Hospital, New York Medical Colleges' Affiliated Residencies Program, New York, NY, United States. Laryngoscope 98/6 I (632-635) 1988. ISSN: 0023-852X. CODEN: LARYA8. Pub. Country: United States. Language: English. Summary Language: English.

AB Aspergillus is a fungus with world-wide distribution and a common endogenous contaminate of the upper respiratory tract. It has become an increasingly recognized pathogen in the paranasal sinuses. In its pathological state is presents in one of several forms that may represent a continuum of the disease: allergic, noninvasive, invasive, and fulminant. The progression and prognosis of this disease depends on the location and immunologic status of the patient. This case represents the fourth reported case of a nonimmunologic compromised patient with intracranial extension of aspergillus. The patient presented with unilateral pansinusitis and radiographic evidence of orbital and anterior cranial fossa invasion. This case illustrates the difficulty of establishing the diagnosis of invasive aspergillosis and differentiating it from neoplastic entities. Radiographs and photomicrographs will be presented to establish this premise.

L55 ANSWER 30 OF 33 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.

86059573 EMBASE Document No.: 1986059573. Myocarditis related to drug hypersensitivity. Lancet 2/8465 (1165-1166) 1985.



CODEN: LANCAO. Pub. Country: United Kingdom. Language: English.

AB Myocarditis due to drug hypersensitivity or allergy is not dose dependent and may arise at any time during treatment. Usually the lesions regress when the drug is stopped, though a prolonged reaction has lately been reported. In contrast, toxic myocarditis is dose related and the effects progress even after withdrawal of the drug. Billingham has summarised the pathological differences. Hypersensitivity myocarditis is associated with eosinophils, atypical lymphocytes, and giant cells but no fibroblasts or fibrosis. The lesions are all of the same age and may be accompanied by a granulomatous infiltrate and non-necrotising vasculitis. In toxic myocarditis the lesions are of different age with no eosinophils, normal lymphocytes, and no giant cells; fibroblasts and fibrosis plus necrotising vasculitis are a feature. Over twenty drugs have been incriminated in the aetiology of hypersensitivity myocarditis, and the main offenders seem to be methyldopa, sulphonamides, and penicillin, other substances include tetracyclines, tetanus toxoid, streptomycin, amphotericin, amitriptyline, chlorthalidone, indomethacin, phenindione, phenytoin, spironolactone, and phenylbutazone. The drugs causing toxic myocarditis are similar in number and include doxorubicin, lithium, catecholamines, barbiturates, theophylline, cyclophosphamide, and paraquat. The initial clinical features of hypersensitivity myocarditis reflect, firstly, the general reaction - rash, fever, and eosinophilia - and, secondly, non-specific markers of cardiac involvement including sinus tachycardia, non-diagnostic ST-T changes in the electrocardiogram, a slight rise in cardiac enzymes, and mild cardiomegaly. It is at this early point, whether or not cardiac signs are present, that cardiac involvement should be considered because in one series 20 of 24 patients with hypersensitivity myocarditis died suddenly; the conduction disturbance from His bundle involvement may lead to heart block, and if ventricular tachycardia ensues it may become intractable. Early diagnosis could therefore be lifesaving, and the signs to look for in a patient with drug hypersensitivity (especially to methyldopa, sulphonamide, or penicillin) are ECG changes, a mild increase in creatine phosphokinase MB, cardiomegaly, and persistent sinus tachycardia, along with peripheral blood eosinophilia. Echocardiography may show impairment of ventricular function. Histological evidence can be obtained by endomyocardial ventricular biopsy; since the reaction is usually generalised, transvenous biopsy of the right ventricle should give the information required. Obviously the first step in management is to stop the causal drug. Most patients will recover in days but a few take weeks, especially when diagnosis has been delayed. In mild cases non-invasive evaluation will suffice, with 24-hour ECGs when ambulation begins and before discharge. In more serious cases cardiac involvement should be monitored by serial endomyocardial biopsy and echocardiography, especially if corticosteroid and/or immunosuppressive therapy is prescribed. Though Taliencio et al used both their patient died; there are no controlled data on their efficacy but it does seem

logical to try corticosteroids with or without immunosuppressants in severe or persistent cases. It is surprising that we do not see more cases of hypersensitivity myocarditis. Perhaps some of the milder ones go unnoticed.

L55 ANSWER 31 OF 33 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.

82194417 EMBASE Document No.: 1982194417. Paranasal sinus aspergillosis: A report of two cases and review of the literature. Petersen J.M.; Baldone S.C.; Sresthadatta T.C.. Doctors Hosp., Columbus, OH, United States. Journal of the American Osteopathic Association 81/8 (549-553) 1982. CODEN: JAOAAZ. Pub. Country: United States. Language: English.

AB Aspergillosis of the paranasal sinuses may occur in a localized, benign form in an otherwise healthy individual. Simple surgical debridement and sinus drainage provide a cure in these noninvasive cases. The fulminant, invasive variety of paranasal sinus aspergillosis, frequently occurring in patients already debilitated by systemic disease or immunosuppressant therapy, requires more extensive surgical debridement and parenteral therapy with amphotericin B. Two case reports are presented in which localized maxillary sinus aspergillosis was successfully diagnosed on pathologic specimens and treated with surgical debridement and drainage. Accurate diagnosis of aspergillosis from examination of surgical specimens and CT evaluation to rule out further local invasion contributed to the successful treatment of these patients.

L55 ANSWER 32 OF 33 MEDLINE

DUPLICATE 13

82169040 Document Number: 82169040. PubMed ID: 7069274. Non-invasive antromycosis: (diagnosis and treatment). Bassiouny A; Maher A; Bucci T J; Moawad M K; Hendawy D S. JOURNAL OF LARYNGOLOGY AND OTOTOLOGY, (1982 Mar) 96 (3) 215-28. Journal code: IWN; 8706896. ISSN: 0022-2151. Pub. country: ENGLAND: United Kingdom. Language: English.

AB Increasing numbers of cases of chronic maxillary sinusitis are encountered which resist frequent sinus irrigation and treatment of predisposing factors. The antral washouts are of unusual consistencies and colours. The antral washouts of six cases were investigated by culture and microscopic examination and proved to contain fungal colonies. Antroscopy was a valuable asset in diagnosis. One patient had a Caldwell-Luc operation and daily irrigation through an indwelling polythene tube followed by daily instillation of clotrimazole (Canesten). The five patients who refused operation were treated by repeated bi-weekly antral washouts followed by instillation of clotrimazole. Weekly samples of antral secretions were examined by culture and microscopic examination until they were free for four consecutive weeks. We believe that frequent antral irrigation and local instillation of a broad-spectrum antimycotic

drug--preferably after debridement--is the treatment of choice for  
antromycosis.

L55 ANSWER 33 OF 33 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.

82036194 EMBASE Document No.: 1982036194. [Sinusal mycosis]. MYCOSES DES  
SINUS. Peytral Cl.; Coupez D.; Vacher S.; et al.. Cent. Mallet Proust,  
Hop. Tenon, 4 F 75020 Paris, France. Annales d'Oto-Laryngologie et de  
Chirurgie Cervico-Faciale 98/3 (93-98) 1981.

CODEN: AOCCAE. Pub. Country: France. Language: French. Summary Language:  
English.

AB The authors take advantage of a recent case to preset the various  
arguments in favour of a diagnosis of sinusal mycosis. The clinical,  
radiological and therapeutic aspects of invasive and non-invasive  
sinusal aspergillosis and mucormycosis are discussed.

L63 0 FILE MEDLINE  
L64 0 FILE CAPLUS  
L65 0 FILE EMBASE  
L66 0 FILE BIOSIS  
L67 0 FILE JICST-EPLUS  
L68 0 FILE WPIDS

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L71 1 FILE CAPLUS

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L73 1 FILE BIOSIS

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L75 1 FILE WPIDS

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L77 ANSWER 1 OF 6 MEDLINE

2001520557 Document Number: 21453632. PubMed ID: 11568626. Eosinophilic mucin rhinosinusitis. Sherris D A; Ponikau J U; Kern E B. LARYNGOSCOPE, (2001 Sep) 111 (9) 1670-2. Journal code: L1W; 8607378. ISSN: 0023-852X. Pub. country: United States. Language: English.

AU Sherris D A; Ponikau J U; Kern E B

CT Check Tags: Human

Diagnosis, Differential

\*Eosinophilia: ET, etiology

\*Eosinophilia: PA, pathology

Evidence-Based Medicine

\*Hypersensitivity: CO, complications

\*Hypersensitivity: PA, pathology

\*Mucins

\*Mycoses: CO, complications

\*Mycoses: PA, pathology

Research Design: ST, standards

\*Rhinitis: ET, etiology

\*Rhinitis: PA, pathology

\*Sinusitis: ET, etiology

\*Sinusitis: PA, pathology

L77 ANSWER 2 OF 6 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.

2000165486 EMBASE Role of fungi in allergic fungal sinusitis and chronic rhinosinusitis [2] (multiple letters). Naylor S.; Ponikau J.U.; Sherris D.A.; Kern E.B.. Dr. S. Naylor, Mayo Clinic Rochester, Rochester, MN, United States. Mayo Clinic Proceedings 75/5 (540-541) 2000. ISSN: 0025-6196. CODEN: MACPAJ. Pub. Country: United States. Language: English.

TI Role of fungi in allergic fungal sinusitis and chronic rhinosinusitis [2] (multiple letters).

AU Naylor S.; Ponikau J.U.; Sherris D.A.; Kern E.B.

CT Medical Descriptors:

\*sinusitis: DI, diagnosis

\*chronic sinusitis: DI, diagnosis

\*chronic sinusitis: SU, surgery

\*fungus

histopathology

eosinophil

immune response

human

letter

Drug Descriptors:

immunoglobulin E: EC, endogenous compound

L77 ANSWER 3 OF 6 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.

2000024302 EMBASE Allergic fungal sinusitis. Dibbem D.A. Jr.; Dreskin S.C.; Page E.H.; Ponikau J.U.; Kern E.B.; Sherris D.A.. Dr. D.A. Dibbem Jr., Univ. of Colorado Hlth. Sci. Center, Denver, CO, United States. Mayo Clinic Proceedings 75/1 (122-123) 2000.  
ISSN: 0025-6196. CODEN: MACPAJ. Pub. Country: United States. Language: English.

TI Allergic fungal sinusitis.

AU Dibbem D.A. Jr.; Dreskin S.C.; Page E.H.; Ponikau J.U.; Kern E.B.; Sherris D.A.

CT Medical Descriptors:

- \*sinusitis
- \*mycosis
- allergy
- nose secretion
- fungus identification
- fungus culture
- bacterial colonization
- radioallergosorbent test
- eosinophilia
- nose mucus
- immediate type hypersensitivity
- letter

L77 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2001 ACS      DUPLICATE 1

1999:282082 Document No. 130:306586 Methods and materials for treating and preventing inflammation of mucosal tissue using antifungal agents, and diagnostic methods and materials. Ponikau, Jens (USA). PCT Int. Appl. WO 9920261 A2 19990429, 98 pp. DESIGNATED STATES: W: AL, AM, AT, AU, AZ,

BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG.

(English). CODEN: PIXXD2. APPLICATION: WO 1998-US22403 19981022.

PRIORITY: US 1997-62709 19971022; US 1997-63414 19971028; US 1997-63418 19971028; US 1998-83272 19980428; US 1998-86397 19980522.

AB The invention involves methods and materials for treating and preventing non-invasive fungus-induced mucositis. Specifically, the invention involves administering an antifungal agent such that it contacts mucus in

an amt., at a frequency, and for a duration effective to prevent, reduce, or eliminate non-invasive fungus-induced rhinosinusitis. This invention also provides methods and materials for diagnosing non-invasive fungus-induced rhinosinusitis and culturing non-invasive fungus from a mammalian mucus sample as well as specific antifungal formulations and medical devices for treating and preventing non-invasive fungus-induced rhinosinusitis. In addn., the invention provides methods and materials for treating and preventing other non-invasive fungus-induced mucositis conditions such as chronic otitis media, chronic colitis, and Crohn's disease. Further, the invention involves methods and materials for treating and preventing chronic asthma symptoms.

IN Ponikau, Jens

IT Respiratory tract diseases

(sinusitis, rhinosinusitis; antifungal agents for treating and preventing inflammation of mucosal tissue, and diagnostic methods and materials)

L77 ANSWER 5 OF 6 MEDLINE

DUPLICATE 2

1999416891 Document Number: 99416891. PubMed ID: 10488788. The diagnosis and incidence of allergic fungal sinusitis. Ponikau J U; Sherris D A; Kern E B; Homburger H A; Frigas E; Gaffey T A; Roberts G D. (Department of Otorhinolaryngology, Mayo Clinic Rochester, Minn 55905, USA. ) MAYO CLINIC PROCEEDINGS, (1999 Sep) 74 (9) 877-84. Journal code: LLY; 0405543. ISSN: 0025-6196. Pub. country: United States. Language: English.

AB OBJECTIVE: To reevaluate the current criteria for diagnosing allergic fungal sinusitis (AFS) and determine the incidence of AFS in patients with chronic rhinosinusitis (CRS). METHODS: This prospective study evaluated the incidence of AFS in 210 consecutive patients with CRS with or without polyposis, of whom 101 were treated surgically. Collecting and culturing fungi from nasal mucus require special handling, and novel methods are described. Surgical specimen handling emphasizes histologic examination to visualize fungi and eosinophils in the mucin. The value of allergy testing in the diagnosis of AFS is examined. RESULTS: Fungal cultures of nasal secretions were positive in 202 (96%) of 210 consecutive CRS patients. Allergic mucin was found in 97 (96%) of 101 consecutive surgical cases of CRS. Allergic fungal sinusitis was diagnosed in 94 (93%) of 101 consecutive surgical cases with CRS, based on histopathologic findings and culture results. Immunoglobulin E-mediated hypersensitivity to fungal allergens was not evident in the majority of AFS patients. CONCLUSION: The data presented indicate that the diagnostic criteria for AFS are present in the majority of patients with CRS with or without polyposis. Since the presence of eosinophils in the allergic mucin, and not a type I hypersensitivity, is likely the common denominator in the pathophysiology of AFS, we propose a change in terminology from AFS to eosinophilic fungal rhinosinusitis.

TI The diagnosis and incidence of allergic fungal sinusitis.

AU Ponikau J U; Sherris D A; Kern E B; Homburger H A; Frigas E; Gaffey T A;  
Roberts G D

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CT Check Tags: Female; Human; Male

Diagnosis, Differential

\*Eosinophils

Incidence

Irrigation

\*Mycoses: CO, complications

Mycoses: IM, immunology

Mycoses: MI, microbiology

Nasal Mucosa: MI, microbiology

Nasal Mucosa: PA, pathology

Nasal Polyps: CO, complications

Prospective Studies

\*Rhinitis, Allergic, Perennial: CO, complications

Rhinitis, Allergic, Perennial: IM, immunology

Rhinitis, Allergic, Perennial: MI, microbiology

\*Sinusitis: DI, diagnosis

\*Sinusitis: IM, immunology

\*Sinusitis: MI, microbiology

Sinusitis: PA, pathology

Specimen Handling: MT, methods

97187041 EMBASE Document No.: 1997187041. [Invasive fungal infections].  
INVASIVE PILZSINUSITIS. Ponikau J.; Wolf E.; Groden C.; Koch U.. Prof.  
Dr. U. Koch, Universitäts-HNO-Klinik, Martinistrasse 52, D-20251 Hamburg,  
Germany. Oto-Rhino-Laryngologia Nova 6/5-6 (250-256) 1996.

Refs: 23.

ISSN: 1014-8221. CODEN: OTNOEQ. Pub. Country: Switzerland. Language:  
German. Summary Language: German; English.

AB Invasive fungal infections of the nasal and paranasal sinuses are rare.

They have to be differentiated from the more frequent allergic-hyperergic  
fungal sinusitis, where the fungi appear only in the nasal. Tissue  
invasion of fungi has mainly been described in immunocompromised patients  
and was lethal in most cases. We present 2 cases of invasive mycosis of  
the paranasal sinuses and describe the clinical appearance, diagnosis  
and therapy. The use of itraconazole appears promising for systemic  
antifungal treatment, which has to be added to surgical treatment. It is  
also superior to amphotericin B in terms of better effectiveness, fewer  
side effects and the possibility of oral administration.

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also superior to amphotericin B in terms of better effectiveness, fewer  
side effects and the possibility of oral administration.

CT Medical Descriptors:

- \*mycosis: DI, diagnosis
- \*mycosis: DT, drug therapy
- \*paranasal sinusitis: DI, diagnosis
- \*paranasal sinusitis: ET, etiology
- \*paranasal sinusitis: DT, drug therapy
- \*rhinitis: DT, drug therapy
- \*rhinitis: ET, etiology
- \*rhinitis: DI, diagnosis
- adult
- article
- case report
- computer assisted tomography
- female
- human
- human tissue
- male



oral drug administration

Drug Descriptors:

\*itraconazole: DT, drug therapy

gadolinium pentetate

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